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AUTHOR Field, Mary Lee
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ABSTRACT

Chinese students' reading strategies are shaped by their cultural assumptions and by the background information, or lack of it, that they bring to the material. Most important, their reading strategies are influenced by (1) traditional methods of reading that have led to investigating each word without always understanding the general concepts of the work, and (2) an attitude toward literature that assumes a philosophical meaning of depth and significance, slowing the reading process and possibly causing the student to use concrete strategies when they are not needed. Once these issues are consciously manipulated by Chinese students, they will learn to develop reading strategies that are appropriate for the reading task at hand. (MSE)

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A PSYCHOLINGUISTIC MODEL OF THE CHINESE ESL READER*

ED274178

Mary Lee Field
Wayne State University

Current research on the nature of the reading process and my own experience teaching English at the Xian Foreign Languages Institute in Xian, People's Republic of China. during 1981-82 have provided me with data that clarify the reading processes of Chinese ESL students. Using a widely accepted model of reading strategies as a foundation, this study constructs a psycholinguistic model of the intermediate to advanced Chinese reader of English; a model that will help teachers understand the behavior, the problems, and the needs of native speakers of Chinese when they read in English.

James Coady's (1979:7) *A Psycholinguistic Model of the ESL Reader* has already given us a useful model of the interactive factors that constitute the reading process for ESL students:

FIGURE 1

1.

Coady also identifies the process strategies used by readers in the following chart. The most concrete strategies are at the top and the most abstract at the

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Mary Lee Field, an Assistant Professor in the Weekend College Program at Wayne State University, has taught EFL in Greece, Japan and China.

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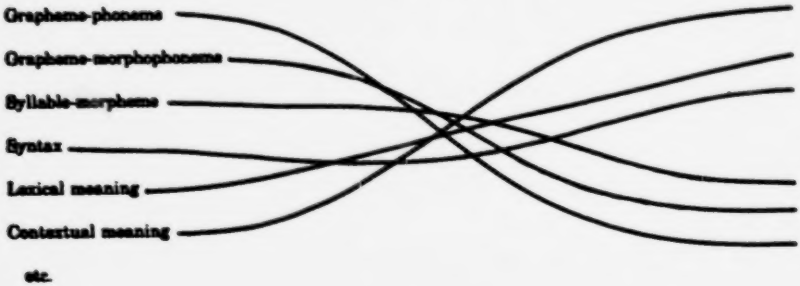
bottom. Coady argues that the skilled reader depends more upon the abstract strategies and less upon the concrete, except in occasional moments of doubt or trouble(1979:7).

FIGURE 2
Process Strategies



Relative change in use of process strategies over time is represented from left to right, e.g., beginning to advanced reader.

2

As readers become more proficient and read more fluently, the abstract strategies are the ones which they use most. Even though the skilled reader may occasionally revert to concrete strategies in difficult passages, the behavior which characterizes an advanced reader includes full use of syntatic, lexical and contextual cues. But Chinese students, (and perhaps many other groups of ESL students) who do not become fluent readers of L2 have failed to switch to these abstract strategies (at the bottom of the list). My observations in China led me to conclude that Chinese students have particular difficulty using those more abstract strategies and attaining fluent levels of reading skill, in part because of a number of socio-cultural factors and also because of adjustments which occur in the switch from reading an ideograpic language to reading an alphabetic one. All these factors influence the Chinese student's progression from a beginning reader to a skilled or advanced reader.

There is at least one theoretical issue which we must address before we turn to the specific psycholinguistic and socio-cultural factors that help shape reading behavior: whether or not one can apply theories and models of the reading process which have been developed for reading in English to the reading process in a language as different, logographically, phonetically and structurally, as Chinese. By assuming that research in reading in English can be applied to other languages, we may be doing what Downing has warned against: using an "ethnocentric or linguacentric view" which would lead "to an unthinking acceptance of the practices of teaching and writing developed in one's own language"(1973b:71). The result could be false transfers, faulty assumptions, and inferences which may be without foundation.

But that concern appears unnecessary. Gray's (1956) early work as well as recent works by Goodman (1975), Rigg (1977) and Barrera (1981) all conclude

that many basic elements and strategies in the reading process are universal and exist in widely variant languages. Thus, in order to learn first hand about Chinese reading habits, I turned to my Chinese colleagues and encouraged them to give me descriptions of the reading process in their native language. In discussions and class exercises they described their reading in Chinese in terms quite similar to those outlined by Goodman (1967) in *Reading: a psycholinguistic guessing game*. Their comments substantiated Goodman's view: there is no reason to believe that the reading process varies greatly from language to language, whether the "graphic sequence is left to right, right to left, or top to bottom"(1975:26). Accepting these universals, we can proceed on the basis that the psycholinguistic factors which Western linguists have identified as part of the reading process for native readers of English also shape Chinese students' reading strategies.

Current reading research encompasses a variety of studies—neurological studies of brain function, right/left hemisphere studies about language usage, contrastive studies of the reading process in different languages, phonological recoding studies, and studies of transfer of skills from L1 to L2—to mention a few. Each area provides copious information, but the information does not necessarily help explain the problems of Chinese ESL readers.

Neurological studies of brain function, including right/left hemisphere studies of language usage, focus on the way the brain processes language. Some studies contend that Chinese and Japanese readers process individual characters and sounds in a different hemisphere, or in a different way, than readers of non-logographic scripts. But since the studies also indicate that the reading process occurs in the left hemisphere for both Chinese and Western readers, this research material is not very helpful in describing the behavior of Chinese readers of English (Tzeng, Hung and Garro 1978; Biederman and Tsao 1979; Tzeng, Hung, Cotton and Wang 1979; Tzeng and Hung 1980; Tzeng and Hung 1981).

Another set of studies, those which focus on different strategies used by readers of alphabets and those used by readers of logographic script, examines the way words are built and recognized, and the speed and accuracy of native readers of different languages at various levels. Some argue that Chinese writing is too clumsy and complex to allow for widespread literacy (Gelb 1952, Goody 1968, Havelock 1976). But others insist that "the difference between logographic and alphabetic writing systems may have been exaggerated" (Downing 1973a:150). These recent studies challenge the idea that Chinese characters are arbitrary and demand unreasonable powers of memorization. Instead, they stress certain similarities between ideographic and alphabetic writing. Leong argues that "the radicals and phonetics composing a character constitute the critical units and resemble morphophonemics in English" (1978:161). In a comparison of writing systems, Smith concludes that "to the fluent reader the alphabetic principle is completely irrelevant. He identifies every word (if he identifies words at all) as an ideogram" (1975:124). A number of other studies provide further evidence to support an argument that reading Chinese is not such a difficult, complex, or mysterious process(Carroll 1972, Nelson and Ladan 1976, Liu 1978, Wang 1981). I recommend these studies to all Westerners; we are so convinced of the simplicity of the alphabet that we probably have overemphasized the difficulties of learning to read a logographic script and have made assumptions from that cultural bias. On the other hand, the studies do not shed much light on the reading problems which my students encountered.

Another research area, that of phonological recoding studies, tests whether or not Chinese readers recode from print to speech, looking at that process as an important part of reading. (The same debate occurs about readers of English). Liu (1978) and Shwedel (1983) argue that Chinese readers, when reading in their native language, do not recode. Others argue that they do—although the process is not intrinsic to the reading process (Tzeng, Hung and Wang 1977; Tzeng and Hung 1980; Treiman, Baron and Luk 1981). The debate is technical and lengthy; moreover, it revealed little that helped explain my Chinese students' reading behavior. Indeed, what is more important in shaping reading habits in their second language is the training that Chinese students receive during years of schooling to read a text aloud.

Although these studies provide much to consider and a fascinating variety of perspectives, they do not provide as direct a look at the strategies used by Chinese readers of English as I had hoped. Their results are not always verifiable by repetition; their experiments are often conducted on patients with aphasia (rather than on *normal* readers), and their inferences come from small samples. Yorio (1981:57) argues that we cannot base our programs and methods on neurolinguistic evidence which is incomplete at best.

However, two fruitful lines of investigation have been, first, that of skills transfer from L1 to L2 and, second, socio-cultural interference as a factor in the acquisition of reading skills. The later includes students' attitudes toward reading, a long tradition of reading aloud, traditional study habits, expectations for literary works, attitudes toward the target language and the level of the students' background knowledge.

Transfer of Reading Skills from L1 to L2

In examining the process of transfer of skills, the first question is how much the native speaker of Chinese can transfer from L1 to L2. What skills are useful in both languages? What process strategies from Chinese will transfer to the reading of English? There are such apparent differences in the two writing systems that it is difficult to determine the amount of transfer, especially for beginning readers. For example, there is no grapheme-phoneme recognition process in reading Chinese characters. But the Chinese beginning reader of English must learn those correspondences, a strategy never needed in L1. In the next process strategy, the grapheme-morphophoneme, the situation is different, but still complex. Most Chinese characters consist of two elements—a radical, which provides a cue to meaning, and a phonemic, which provides information about pronunciation. The existence of these parts sets up a possible transfer from reading characters to reading words. The possibility of that transfer is supported by Leong's argument that the frequent repetition of about two hundred radicals in Chinese "must necessarily relate to morphological and spelling constraints that are analogous to English" (1973:392). On the level of syllable-morpheme there is even more possibility of transfer, since this process strategy is one heavily used by Chinese students reading in L1.

As the student gains ability and has some mastery over L2, there are the more abstract process strategies which can be transferred, but which too often are not because of socio-cultural interference. In a study of the correlation between a student's level of reading comprehension in his native language and level

of reading comprehension in English, Groebel (1980) concluded that where higher levels of reading comprehension are tested, there is a demonstrable similarity between the student's ability in the native language and the target language. Furthermore, Mott (1981) illustrated that for German students reading in German and English there was a correlation between the reading comprehension and ability in both languages; indeed, she argues for being able to predict a student's performance from knowing about his/her skill in L1. That conclusion, however, is less obvious for Chinese students; my fourth year students in a foreign language institute had not attained advanced levels of reading skill. Even the very best speakers and learners were painfully slow readers.

To investigate the causes, I first established that the Chinese teachers use reading strategies and skills just like the ones used by native English speakers when reading in their own language. A lengthy discussion with Chinese teachers at my school (all proficient *speakers* of English) about the strategy of guessing words from context in their native language revealed that they recognize and use all of the types of context which Clarke and Silberstein (1977:145-6) identify in Toward a Realization of Psycholinguistic Principles in the ESL Reading Class: synonym in apposition, antonym, cause and effect, association between an object and its purpose or use, description and example. All the teachers agreed that those strategies are ones they frequently use when reading in Chinese, and use automatically. They agreed that they did not run to the dictionary to look up an unfamiliar Chinese character except as a last resort, if then. And they certainly used skimming and scanning techniques when reading magazines or newspaper articles, as well as predicting strategies. But when we discussed the transfer of those skills to reading in English, they said it was not possible, not even thinkable. More discussion ensued, and we explored their objections to my hypothesis that transfer was both possible and usually desirable. They argued first that as L2 readers they had very limited vocabularies and had to stop at each new word to look it up. They also insisted that they could not go from one sentence they did not understand to a following sentence without stopping to clarify the first one. The result would be confusion. Finally, they argued that the best way to understand a text was to read it aloud—to recite it carefully—many times over. Each of those techniques is useful to some degree, but I saw that these techniques were the ones being used to the exclusion of other, more abstract, strategies.

Certainly there are good reasons for their hesitation. Yorio (1971:108) explains that the ESL reader is at a great disadvantage because of a number of factors, including an imperfect knowledge of the language, unfamiliar cultural assumptions, and continuous interference from the native language. Added to those problems are the cultural assumptions which Chinese students also brought to the task. Both sets of problems delayed the transfer of reading skills from the advanced level of L1 to reading in L2.

Cultural Influences

The cultural assumptions which influence Chinese readers of English include their attitudes toward reading, the intensive/extensive reading classes in their schools, reading aloud, traditional testing methods, and cultural expectations regarding literature. A recent study by Devine (1983) of the internalized models

of the reading process which ESL students have of their own ability to read provides evidence that students have sound-centered, word-centered or meaning-centered models of the process. Chinese students in my classes would certainly fit into the first two of those models for L2, but few would have practiced the meaning-centered process, even though that is the process they use as mature readers of L1. [Richard (1982) and Kraemer (1982) have both found similar problems with Japanese students who have the strategies for decoding but focus too much on details rather than on comprehension strategies.] That meaning-centered model would also entail the use of the abstract strategies, but one of the cultural attitudes which the Chinese have towards books and learning slows the leap to such a model.

The Chinese have a great reverence for education and learning (T. Scovel 1983) as well as enormous respect for the written word (Maley 1983), both of which are reflected in the traditional way of teaching in China. The Chinese have placed great emphasis on memorization of texts (Chang 1983), and Janene Scovel describes how children are taught to memorize without being asked to understand the meaning of the text. She concludes that "the discipline to memorize and learn by rote is believed to be an essential characteristic necessary for successful language learning in China" (1983:106). Those attitudes, I posit, are transferred to the learning of English. The Chinese teachers in my classes who read articles by Goodman or Coady about the reading process were quick to contrast the ideas in those articles with the traditional attitudes toward reading which they received in their own educations. They were quite conscious of the importance that memorizing had played in their language learning process. They were less conscious of other perceptual and cognitive processes which occurred as they learned L1. Leong argues that "although each character has to be learned, the often-mentioned reliance on rote memory is overrated"(1973:387). Moreover, these teachers recognized their own use of abstract strategies in L2 when those strategies were illustrated and demonstrated through exercises in class.

The issue here seems to be mainly what conscious *strategies* we take with us from the learning process. Chinese readers' transfer of skills from L1 to L2 is actually the transfer of the conscious skills which Chinese readers use in L1 – ones which were explicit, repeated and discussed as methods in their own elementary, secondary and even tertiary educations. By coming to understand some of the *unconscious* strategies which they also used to become skilled L1 readers, they will be able to improve their reading ability in L2. Chinese teachers in my class became deeply interested in these abstract processes as they were discussed in our class meetings. They were eager to practice those skills and to become more meaning-centered readers. Using materials such as newspapers, *Reader's Choice* (Baudoin et al. 1977), and nonfiction, they practiced and discussed the techniques they were using.

Chinese students' and teachers' attitudes toward reading and the reading process have also been shaped by the curriculum in Chinese secondary and tertiary institutions, a curriculum that specifies both intensive reading and extensive reading courses. T. Scovel (1983), J. Scovel (1983) and Maley (1983) all give descriptions of the confusion that the term "intensive reading" causes for foreign teachers who teach in China. When foreign teachers at my school questioned their Chinese colleagues about the meanings of the two terms, long discussions occurred as we argued the need for accurate, precise translations versus

the usefulness of general, rapid comprehension. Teachers there were in the process of self-criticism and a careful revision of these courses. Their attitudes indicated that they were remarkably flexible and open to new ideas (Hui 1983). Teachers in the reading class explained that the course titled "intensive reading" was really a language skills course and had little to do with teaching reading. The "extensive reading" course was supposed to teach reading skills, but had lapsed into a course basically the same as the intensive course—with detailed translations, frequent grammar exercises, focus on sentence-length passages, and memorization of passages—because the teachers brought to the class their assumptions about reading that evolved from their own past training.

The practice of reading aloud has also shaped Chinese students' and teachers' attitudes about reading. My students and colleagues often explained to me that the practice of getting up early in the morning and walking outside with their intensive reading texts, reading (or declaiming) at full voice was clear evidence of their diligence, skill, and strength. In classrooms, whether they were between classes or trying to study for a test, they usually read passages aloud, creating a cacaphony of some note. When we discussed the value of reading the text aloud, they explained that it helped them to understand and to remember the material. Thus, students may have transferred their traditional study method of reading aloud in learning Chinese (as described by J. Scovel 1983) to the learning of English. They focused on short passages, committed them to memory, repeated them aloud. They felt that they understood the material because they had committed it to memory. The whole exercise enforces the sound-centered model of reading and does not encourage the student to use more abstract strategies.

A final influence shapes Chinese students' and teachers' attitudes toward the reading process in L2: the cultural assumptions and expectations they bring to the reading of literature. Chinese novels and stories have a markedly different literary tradition of rhetorical and narrative conventions that shape the Chinese readers' expectations (Cole et al. 1971, Bloom 1981, Plaks 1977). Western expectations about plot sequence, character development, suspense and motivation are all shaped by those traditions. Chinese schools emphasize reading of literature as a way of learning a language, and Chinese students are eager to read and understand all of American literature. But different literary and rhetorical traditions increase the difficulty of that study. The Chinese, in contrast to Japanese or Western ESL students, are especially deprived of access to background information about Western culture. Even the most diligent of them are able to bring very little background to the text because they have not had access to the materials. And without that background information the process of reading novels, stories, and most of all poetry is quite difficult (see Debyasuvarn 1970, Field 1984, McDermott 1977, Schafer 1981, Johnson 1982, Perkins 1983).

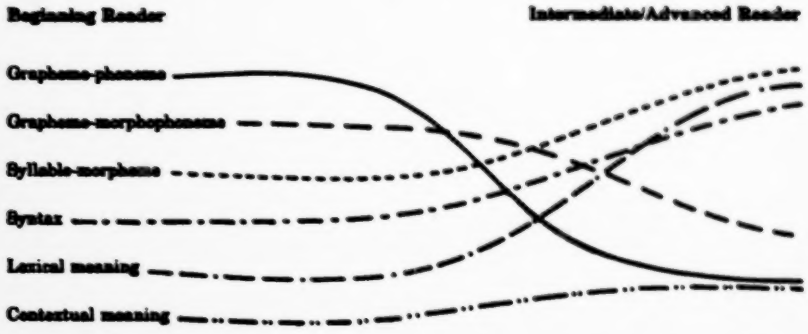
Using the interactive factors which Coady (1979) established—process strategies, background knowledge, conceptual abilities—we see that there are weak links in the system for Chinese students. Certainly their conceptual abilities equal those of any other group of students; indeed, the discipline they have learned in their studies makes them especially devoted and diligent. But the background knowledge that a Chinese student brings to a reading of Western essays, stories, novels or poetry will be limited. It is obvious that students who have never seen or heard of a golf course will have difficulty with a story which depends on knowledge of that cultural information. And a more subtle and complex issue such

as understanding the relationships between parents and children in American culture will create enormous problems since Chinese students will bring little information to the story from a knowledge of America, and their own experience may cause them to make assumptions which do not apply to American life. Add, finally, the cultural interferences that keep students from using abstract reading strategies and a new model emerges.

A Psycholinguistic Model of the Chinese Reader of English

My proposed model of the Chinese ESL reader is thus different from the one developed by Coady (1979). The process strategies defined by Coady have been influenced by transfer (or lack of transfer) from L1 to L2, by cultural attitudes, and by the traditional Chinese study habits. A variety of factors have made Chinese students reluctant to give up dependence on concrete strategies and have even made it particularly difficult for most Chinese students to move on to the abstract strategies without special help and encouragement. Although it will take more analysis to determine how much of the failure to use abstract strategies comes from the encounter with new or unfamiliar material, how much comes from the cultural interferences, and how much is the result of transfer patterns, the following model helps to explain why so many Chinese students I encountered could speak English quite well but read with painful slowness and rather low comprehension. The most marked differences in this chart and Coady's appear in the grapheme-phoneme, syllable-morpheme and contextural meaning strategies.

FIGURE 3



An analysis of each line on the chart reveals that some strategies have been reinforced: transfer or cultural factors have caused students to keep on using a strategy even when it prevents them from moving to more fluent levels of reading speed and comprehension. In addition, other strategies have been discouraged by cultural or transfer patterns, and Chinese students are slow to use them. These students continue to use syllable-morpheme and grapheme-morphophoneme long after they are efficient; and since the contextural meaning and syntax strategies have been discouraged, they are slower to develop those skills.

Grapheme-phoneme: Students learn this strategy when they begin the study of an alphabetic language like English. Since there appears to be no transfer from L1, they do not depend heavily on this process as they become more advanced readers. However, they are hesitant to discard it completely and may revert to the grapheme-phoneme level instead of trying to guess from context in L2.

Grapheme-morphophoneme: The practice of looking for radicals within Chinese characters appears to have *reinforced* this strategy also, making students rely upon it when more abstract strategies would increase their reading speed and comprehension.

Syllable-morpheme: This strategy has been greatly *reinforced* by the transfer from reading Chinese characters in L1; the syllable provides the cue to meaning. In addition, Chinese students rely on this technique when reading aloud. Students continue to read assignments aloud, even when they should be at advanced reading levels, and their reading speed seldom improves.

Syntax: This strategy has been *discouraged* by the practice of detailed translation of English into Chinese in order to comprehend. In other words, students do not venture to guess the meaning of a word or the function of a word from its place in the sentence. Even though Chinese students use syntax cues constantly in reading in L1, they are slow to transfer that strategy to L2.

Lexical meaning: This strategy has been *reinforced* to the extent that students constantly use the dictionary to check on the specific meaning of a word. But as a result, students hesitate to guess the meaning of a word and they often write in the Chinese translation of a word over the English word in the text. Thus, they do not develop the skill of recognizing words quickly and gaining reading speed.

Contextual meaning: This most abstract strategy has been *discouraged* by the traditional teaching methods, by the demands for translations of all types of reading materials, and by the demands for word accuracy rather than general understanding. Again, this strategy is one which Chinese students use when reading in L1, but hesitate to transfer to L2.

The way each of these strategies have been either encouraged or discouraged makes evident why the shift to abstract strategies, which occurs in the model presented by Coady, does not occur so rapidly, if at all, among Chinese readers. These readers rarely develop much ability to shift from one strategy to another when the material or the reading task demands a shift because their learning patterns discourage such shifting. Yet that ability to shift is a crucial step to master in order to become a skilled reader (see Gibson and Levin 1975, Hill 1981, Laberge and Samuels 1974, Van Parreren and Schouten-Van Parreren 1981, Goodman et al. 1978).

In Coady's (1979) model there is a clear interaction between conceptual abilities, background knowledge and process strategies. But Chinese students lack the visual and cultural materials to build background knowledge, so the process strategies and conceptual abilities are not fully reinforced. Likewise, when students are chained to process strategies that remain relatively concrete rather than moving to abstract ones, the interactive process breaks down. They are not able to use their conceptual abilities to the fullest potential.

Students reading in L1 or L2, when faced with a particularly difficult reading

task, will certainly revert to concrete reading strategies. But with practice using more abstract strategies, especially the use of contextual cues, their dependence on the others may lessen; more fluent reading will then develop. What remains is for teachers to make these process strategies conscious and explicit, to help students become aware of the strategies they use when reading in L1, and then to help students transfer those strategies to L2. When students become aware of the strategies they already use in L1 to improve their reading skill and comprehension in L2, they can make conscious efforts to develop those skills. The process is slow, and cultural interferences, attitudes toward the nature of the learning process as well as many of the other factors discussed above will complicate the teacher's efforts.

Chinese students' reading strategies are shaped by their cultural assumptions and by the background information (or lack of it) that they bring to the material about the people and situtations. But most important, their reading strategies are influenced by traditional methods of reading which have led to investigating each word without always understanding the general concepts of the work, and by an attitude toward literature that assumes a philosophical meaning of depth and significance which slows the reading process and may cause the student to use concrete strategies when they are not really needed. Making these issues conscious for our students will help them develop the reading strategies most appropriate for the reading task at hand.

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